ERF 2806, UNIT 1, WESTERN VIEWS, WESTERING, PORT ELIZABETH EASTERN CAPE

CREATED BY:	
Name:	Anton Marais *Pr.Eng*
Position:	Regional Engineer
Date:	22 May 2025

TABLE OF CONTENTS **PAGE NO.**

1. INTRODUCTION 3
2. LOCATION 3
3. SITE GEOLOGY 4
4. INVESTIGATION APPROACH 4
5. ASSESSMENT FINDINGS 5
6. PHOTOGRAPHS OF FINDINGS 6
7. DISCUSSION OF DEFECTS 8
8. CONCLUSION 8

ANNEXURE A: Report from Competent Person ..... **Error! Bookmark not defined.**

1. INTRODUCTION

1.1. A request was received from the Conciliation Officer (Eastern Cape), Mr. Reuben Jonas, to conduct an assessment at the home following a complaint regarding the appearance of defects in the house. The Engineering and Technical Services (ETS) Team was tasked to conduct an assessment and provide a report.

1.2. This report provides the findings and the possible causes of the defects. The observations and comments made in this report are based on the following:

1.2.1. External observations by the structural engineer

1.2.2. No opening up works, tests or other investigations have been carried out on foundations or critical structural elements that were not visible.

1.2.3. Photographs of the existing condition of the house that were taken during site visits are provided in the report.

1.2.4. It shall be noted that the observations made in this report are representative of items noted during the investigation and should not be considered as a <u>comprehensive snag list</u> hence the document should not be used as the <u>sole source of defects and snags requiring attention</u>. This report is based on purely visual assessment.

2. LOCATION

2.1. The subject erf is in the Western View security complex situated in Westering in Port Elizabeth/Gqeberha in the Eastern Cape. Figure 1 below depicts the regional context of the subject site.

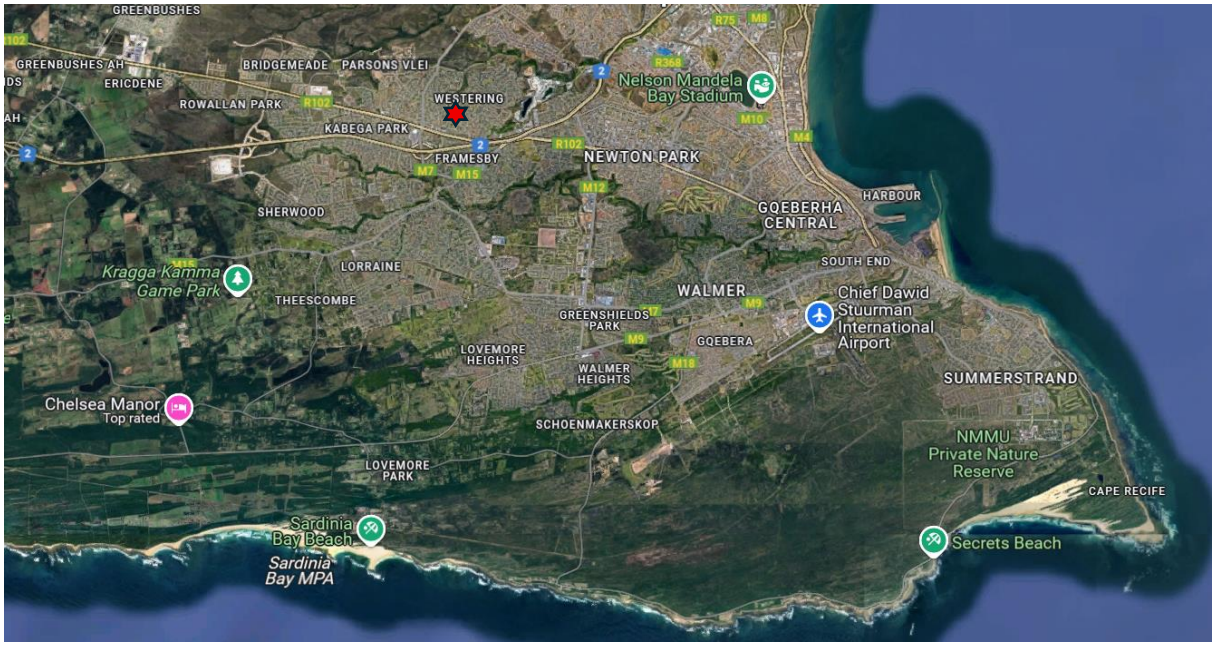

Figure 1: Locality Map

2.2. In terms of the terrain, the complex slopes towards the north north-west. The slope is sufficient to effectively drain the stormwater effectively towards the access gate in Bramhope street.

3. SITE GEOLOGY

3.1. The house is located in a housing complex in the Westering suburb of Port Elizabeth on the southeastern tip of the Eastern Cape. Consultation of the 1:250 000 geological series of maps, sheet 3342 Port Elizabeth indicates predominantly coastal aeolianites of the Nanaga Formation (Algoa Group), composed of calcareous sandstones and sandy limestones. Soils derived from the weathering of these aeolianites, likely including sandy soils and the potential for calcrete and red clay-rich soil development. The possibility of older Table Mountain Group (Peninsula Formation) quartzites occurring at deeper levels. Figure 3 below shows the geological map.

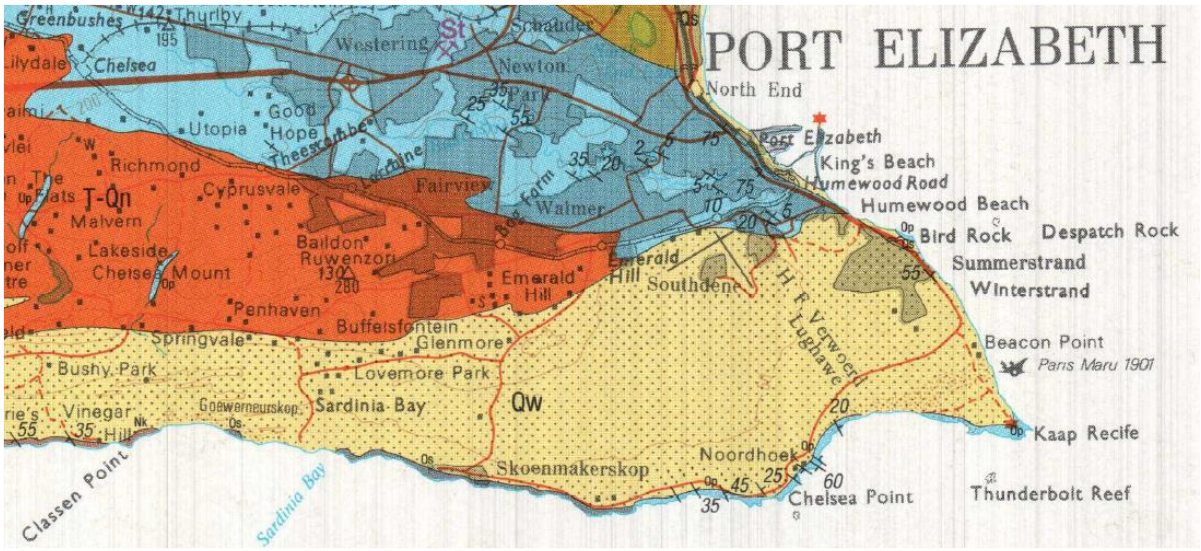

Figure 2: Geology map

3.2. Based on the enrolment documentation the competent person has indicated the soil class as C. This is silty sands, sands, sandy and gravely soils which is compressible and potentially collapsible material.

4. INVESTIGATION APPROACH

The assessment was performed using the walk-through survey and noting all defects.

4.1. Walk-Through Survey

4.1.1. As previously mentioned, this assessment was purely visual and there was no testing done.

4.1.2. The objective of the walk-through survey is to visually observe the Property so as to obtain information on material systems and components for the purposes

of providing a brief description, identifying physical deficiencies to the extent that they are easily visible and readily accessible.

4.1.3. The walk-through survey was conducted by a qualified structural engineer with a well-rounded knowledge and experience in evaluating pertinent building systems, and components, supported by the senior home inspector in order to provide increased detail in reporting and insight into their respective systems' conditions,

4.1.4. The walk-through survey was intended to focus on the following areas:

4.1.4.1. Property/Site Features – Observations on the type, condition and adequacy of the general topography, storm water drainage, ingress and egress.

4.1.4.2. Structural Frame and Building Envelope – Typically observations on the type, condition and adequacy of the foundation solution, building frame, façade and curtain walls, and the roofing systems form part of structural frame/building envelope assessment.

4.1.4.3. Structural systems are frequently concealed and may be inaccessible during an assessment.

4.1.4.4. The NHBRC's assessment was limited to the identification of readily visible indicators of common problems. In this case, foundations were not accessible as well as the roof.

5. ASSESSMENT FINDINGS

This section details the findings which were from visual assessment.

The house is single story house with a single garage.

5.1. Water damage

5.1.1. At the western corner of the garage next to the garage door water damage is visible on the masonry walls as well as the ceiling and cornice.

5.1.2. At the south corner of the garage on the southeastern wall the cornice has pulled away from the wall and minor damp damage is visible on the cornice.

5.1.3. In the southeastern wall where the control joint joins the cornice water damage is visible on the ceiling, cornice and wall.

5.1.4. A meter from the northern corner of the garage, water damage is visible on the cornice and wall.

6. PHOTOGRAPHS OF FINDINGS

Figure 3: Damp damage at the western corner of the garage.

Figure 4: Water damage on cornice in southern corner of garage

Figure 5: Water damage at control joint on southeastern wall of garage.

Figure 6: Water damage on the northwestern garage wall at the cornice.

7. CONCLUSION

7.1. The water damage on the ceiling, cornices and walls is an indication of moisture entering the garage through the roof edge behind the parapet walls.